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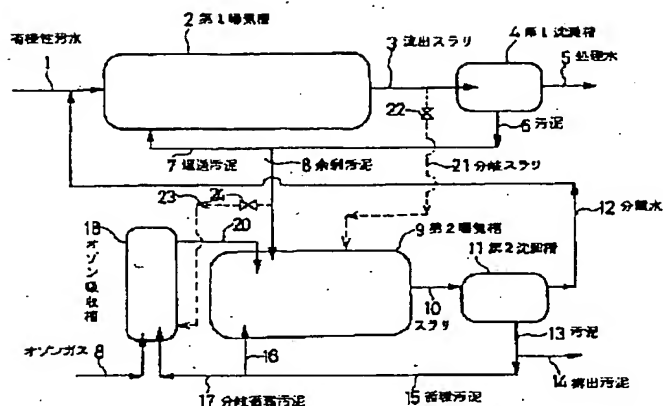
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APPLICANT : EBARA CORP;

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TITLE : WEIGHT-REDUCING METHOD OF ORGANIC SLUDGE



ABSTRACT : PROBLEM TO BE SOLVED: To stably and highly remove phosphorus and to reduce generation of a surplus sludge by allowing a dense iron oxide or aluminum oxide particulates to coexist in an aeration tank with an activated sludge at the time of purifying biologically an org. sewage by an activated sludge process.

SOLUTION: The org. sewage 1 introduced to the first aeration tank 2 is purified by subjecting it to an aerobic biological treatment, and also the phosphorus is adsorbed and removed with the dense iron oxide or aluminum oxide particulates coexisting with the activated sludge. An effluent slurry 3 from the aeration tank 2 is subjected to a solid-liq. separation with the first sedimentation tank 4, then the greater part of the concentrated sludge 6 is returned to the first aeration tank 2 as a return sludge 7, but a part of the concentrated sludge 6 is aerated aerobically with the second aeration tank 9, and the slurry 10 is returned to the second sedimentation tank 11. A part of the sludge 13 precipitated and concentrated here is returned to the second aeration tank 9 as a circulating sludge 15, and the other is transferred to an ozone absorbing tank 18 as a branched circulating sludge 17 and solubilized by a strong oxidation function of a gaseous ozone 19.

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